

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

PENDING CLAIMS

1. (Previously amended) A method for making a transistor containing a gate dielectric structure, comprising:
- providing a gate conductor;
 - providing a channel; and
 - providing, between the gate conductor and the channel, an oxide layer of the gate dielectric structure by an in-situ steam generation process.
2. (Cancelled)
3. (Previously amended) The method of claim 1, wherein the transistor is a thin film transistor.
4. (Cancelled)
5. (Previously amended) The method of claim 3, wherein the in-situ steam generation process is performed at a temperature ranging from about 600 to about 900 degrees Celsius.
6. (Original) The method of claim 1, wherein the in-situ steam generation process is performed at a pressure ranging from about 100 millitorr to about 760 torr.
7. (Original) The method of claim 1, wherein the in-situ steam generation process is performed for a time sufficient to deposit an oxide thickness of about 10 to about 200 angstroms.
8. (Previously amended) The method of claim 28, further including annealing the oxide layer in a nitric oxide atmosphere.
9. (Previously amended) A method for making a SONOS device, comprising:
- providing a channel region;
 - providing a first oxide layer on the channel region by an in-situ steam generation process;
 - providing a nitride layer on the first oxide layer; and

providing a second oxide layer on the nitride layer.

10-11. (Cancelled)

12. (Original) The method of claim 9, wherein the in-situ steam generation process is performed at a temperature ranging from about 750 to about 1050 degrees Celsius.

13. (Original) The method of claim 9, wherein the in-situ steam generation process is performed at a pressure ranging from about 100 millitorr to about 760 torr.

14. (Original) The method of claim 9, wherein the in-situ steam generation process is performed for a time sufficient to deposit an oxide thickness of about 10 to about 200 angstroms.

15. (Original) The method of claim 9, further including annealing the oxide layer in a nitric oxide atmosphere.

16-19. (Cancelled)

20. (Previously amended) The method of claim 27, further including annealing the oxide layer in a nitric oxide atmosphere.

21. (Previously amended) A method for making a gate dielectric structure for a SONOS device, comprising:

providing silicon;

providing an oxide layer of a gate dielectric structure on the silicon by in-situ steam generation, the oxide layer having a thickness of about 10 to about 200 angstroms; and

annealing the oxide layer in a nitric oxide atmosphere.

22. (Previously amended) A method for making a gate dielectric structure for a thin film transistor or a SONOS device, comprising:

providing a gate conductor;

providing a channel region; and

providing, between the gate conductor and the channel region, an oxide layer of a gate dielectric structure by an in-situ steam generation process performed at a temperature ranging from about 600 to about 1050 degrees Celsius, a pressure ranging from about 100 millitorr to about 760 torr, and for a time sufficient to deposit an oxide thickness of about 10 to about 200 angstroms.

23. (Previously amended) A thin film transistor containing a gate dielectric structure made by a method comprising:

providing a gate conductor;

providing a channel region; and

providing, between the gate conductor and the channel region, an oxide layer of the gate dielectric structure on the channel region by an in-situ steam generation process.

24. (Previously amended) A SONOS semiconductor device made by a method comprising:

providing a channel region;

providing a first oxide layer on the channel region by an in-situ steam generation process;

providing a nitride layer on the first oxide layer; and

providing a second oxide layer on the nitride layer.

25. (Previously amended) An integrated circuit containing a thin film transistor with a gate dielectric structure made by a method comprising:

providing a gate conductor;

providing a channel; and

providing, between the gate conductor and the channel, an oxide layer of the gate dielectric structure by an in-situ steam generation process.

26. (Previously amended) An integrated circuit containing a SONOS semiconductor device made by a method comprising:

providing a silicon wafer or silicon layer;

providing a first oxide layer on the silicon wafer or silicon layer by an in-situ steam generation process;

providing a nitride layer on the first oxide layer; and

providing a second oxide layer on the nitride layer.

27. (Previously added) The method of claim 1, wherein the transistor is a SONOS transistor.

28. (Previously added) The method of claim 3, wherein the transistor is a SONOS transistor.

29. (Previously added) The method of claim 3, wherein the transistor comprises a floating gate.

30. (Previously added) The method of claim 21, wherein the silicon is a surface of a silicon wafer.

31. (Previously added) The method of claim 21, wherein the silicon comprises polysilicon.

32. (Previously added) The transistor of claim 23, wherein the transistor comprises a floating gate.

33. (Previously added) The integrated circuit of claim 25, wherein the transistor comprises a floating gate.

34. (Previously added) The transistor of claim 27, wherein the gate conductor comprises metal.

35. (New) A method for making a transistor containing a gate dielectric structure, comprising:

providing a gate conductor;

providing a channel; and

providing, between the gate conductor and the channel and in contact with the channel, an oxide layer of the gate dielectric structure by an in situ steam generation process.

36. (New) A method for making a SONOS device, comprising:

providing a channel region;

providing a first oxide layer in contact with the channel region by an in-situ steam generation process;

providing a nitride layer in contact with the first oxide layer; and

providing a second oxide layer in contact with the nitride layer.

37. (New) A SONOS semiconductor device made by a method comprising:

providing a channel region;

providing a first oxide layer in contact with the channel region by an in-situ steam generation process;

providing a nitride layer in contact with the first oxide layer; and

providing a second oxide layer in contact with the nitride layer.

38. (New) An integrated circuit containing a SONOS semiconductor device made by a method comprising:

providing a silicon wafer or silicon layer;

providing a first oxide layer in contact with the silicon wafer or silicon layer by an in-situ steam generation process;

providing a nitride layer in contact with the first oxide layer; and

providing a second oxide layer in contact with the nitride layer.

39. (New) A method for making a gate dielectric structure for a SONOS device, comprising:

providing a channel;

providing an oxide layer of a gate dielectric structure in contact with the channel by in-situ steam generation, the oxide layer having a thickness of about 10 to about 200 angstroms; and annealing the oxide layer in a nitric oxide atmosphere.

40. (New) A method for making a gate dielectric structure for a thin film transistor or a SONOS device, comprising:

providing a gate conductor;

providing a channel region; and

providing, between the gate conductor and the channel region and in contact with the channel region, an oxide layer of a gate dielectric structure by an in-situ steam generation process performed at a temperature ranging from about 600 to about 1050 degrees Celsius, a pressure ranging from about 100 millitorr to about 760 torr, and for a time sufficient to deposit an oxide thickness of about 10 to about 200 angstroms.

41. (New) A thin film transistor containing a gate dielectric structure made by a method comprising:

providing a gate conductor;

providing a channel region; and

providing, between the gate conductor and the channel region and in contact with the channel region, an oxide layer of the gate dielectric structure on the channel region by an in-situ steam generation process.

42. (New) An integrated circuit containing a thin film transistor with a gate dielectric structure made by a method comprising:

providing a gate conductor;

providing a channel; and

C1
Cmp.

providing, between the gate conductor and the channel and in contact with the channel, an oxide layer of the gate dielectric structure by an in-situ steam generation process.
